

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 10, 2010 has been entered.

Response to Amendment

2. Applicant's amendment filed on May 10, 2010 has been entered. The specification has been amended. Claims 9, 11, 12 and 16 have been amended. No claims have been cancelled. No claims have been added. Claims 1-16 are still pending in this application, with claims 9 and 16 being independent and claims 1-8 and 13-15 have been withdrawn from consideration.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumazawa (US Patent 6,967,743) in view of Yokoyama (US Patent Application Publication 2001/0006424).

Regarding claim 9, Kumazawa disclosed a host apparatus (**Fig. 1, #10**) creating print data to be sent to a printer (**Fig. 1, #20 + #30**), the host apparatus being characterized in that it comprises:

a controller (**CPU in host of Fig. 1, #10**) that sends the print data to the printer and instructs the printer to perform printing (**col. 4, lines 51 – 67**) and in the event that a prescribed print cancellation condition of the printer exists (**col. 1, lines 24 – 25**), cancels printing in units of pages at the printer such that printing continues until printing of a page currently being printed is completed, and stops upon the completion of the printing of the page (**col. 5, lines 8 – 15, in a case where a paper shortage in a paper-cassette, the printing continues until printing of a page currently being printed is completed**), job status information of the printer being updated after the cancellation (**col. 5, lines 8 – 15**), and a storage device that stores the updated job status information of the printer received from the printer (**col. 5, lines 8 – 15, the host stores the updated job status information of the printer received from the printer until the error is removed**), wherein the host apparatus transmits the stored job status information to the printer in the event that the prescribed print cancellation condition of the printer is eliminated (**col. 3, lines 28 – 34**), and

wherein the controller, in the event that the prescribed print cancellation condition of the printer is eliminated, requests the printer to resume printing an unprinted page subsequent to the completed page based on the job status information transmitted from the host apparatus (**col. 3, lines 28 – 34, and col. 5, lines 8 – 15**).

However, Kumazawa fails to explicitly disclose wherein in the event that a prescribed print cancellation condition of the host apparatus exists, requests cancellation of printing in units of pages at the printer, and in the event that the prescribed print cancellation condition of the printer is eliminated, requests the printer to resume printing an unprinted page subsequent to the completed page.

However, in a similar field of endeavor Yokoyama discloses a printing system. In addition, Yokoyama discloses, in the event that a prescribed print cancellation condition of the host apparatus exists, requests cancellation of printing in units of pages at the printer (**paragraph 0040, in event the failure for suspend the print job, a command for suspend the print job is transmitted to the second copier (as printer)**), and in the event that the prescribed print cancellation condition of the printer is eliminated, requests the printer to resume printing an unprinted page subsequent to the completed page (**paragraph 0041**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kumazawa, and cancel and resume the print job from host apparatus instead of from printer, as taught by

Yokoyama. The motivation for doing this is that in a case where an error happens in host apparatus, the suspension and resumption can still be handled properly.

Regarding claim 16, Kumazawa disclosed a host apparatus (**Fig. 1, #10**) creating print data to be sent to a printer (**Fig. 1, #20 + #30**), the host apparatus comprising:
a controller (**CPU in host of Fig. 1, #10**) that sends the print data to the printer and instructs the printer to perform printing (**col. 4, lines 51 – 67**) and
in the event that a prescribed print cancellation condition of the printer exists (**col. 1, lines 24 – 25**), cancels printing of the printer in units of pages so as to continue printing of a page currently being printed until completion of the printing of the page and to stop printing upon the completion of the printing of the page (**col. 5, lines 8 – 15, in a case where a paper shortage in a paper-cassette, the printing continues until printing of a page currently being printed is completed**), job status information of the printer being updated after the completion of the printing of the page (**col. 5, lines 8 – 15**), and
a storage device that stores the updated job information status information of the printer received from the printer (**col. 5, lines 8 – 15, the host stores the updated job status information of the printer received from the printer until the error is removed**),
wherein the host apparatus transmits the stored job status information to the printer in the event that the prescribed print cancellation condition of the printer is eliminated (**col. 3, lines 28 – 34**), and
wherein the controller, in the event that the prescribed print cancellation condition of the printer is eliminated, requests the printer to resume printing an unprinted page

subsequent to the completed page based on the job status information transmitted from the host apparatus (**col. 3, lines 28 – 34, and col. 5, lines 8 – 15**).

However, Kumazawa fails to explicitly disclose wherein in the event that a prescribed print cancellation condition of the host apparatus exists, issuing a page cancellation request to the printer wherein the page cancellation request instructs the printer to cancel printing of the printer, and in the event that the prescribed print cancellation condition of the printer is eliminated, requests the printer to resume printing an unprinted page subsequent to the completed page.

However, in a similar field of endeavor Yokoyama discloses a printing system. In addition, Yokoyama discloses, in the event that a prescribed print cancellation condition of the host apparatus exists, issuing a page cancellation request to the printer wherein the page cancellation request instructs the printer to cancel printing of the printer (**paragraph 0040, in event the failure for suspend the print job, a command for suspend the print job is transmitted to the second copier (as printer)**), and in the event that the prescribed print cancellation condition of the printer is eliminated, requests the printer to resume printing an unprinted page subsequent to the completed page (**paragraph 0041**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kumazawa, and cancel and resume the print job from host apparatus instead of from printer, as taught by

Yokoyama. The motivation for doing this is that in a case where an error happens in host apparatus, the suspension and resumption can still be handled properly.

5. Claims 10 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumazawa in view of Yokoyama, and in further view of Watanabe et al. (US Patent Application Publication 2002/0105669), hereinafter referred as Watanabe.

Regarding claim 10 (depends on claim 9), Kumazawa in view of Yokoyama fail to explicitly disclose the host apparatus wherein the prescribed print cancellation condition is:

whether a battery charge level of an internal battery has decreased to a preestablished prescribed value; or

whether a user has issued a printing interruption instruction; or

whether a battery charge level of an internal battery has decreased to a preestablished prescribed value and a user has issued a printing interruption instruction.

However, in a similar field of endeavor Watanabe discloses a printing system. In addition, Watanabe discloses the host apparatus wherein the prescribed print cancellation condition is: whether a battery charge level of an internal battery has decreased to a preestablished prescribed value (**paragraph 0013**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kumazawa in view of Yokoyama, and add a battery charge level as one of the print cancellation condition, as

taught by Watanabe. The motivation for doing this is to apply the cancellation condition to some portable devices.

Regarding claim 11 (depends on claim 9), Kumazawa in view of Yokoyama fail to explicitly disclose the host apparatus further comprising storage means for storing interruption location information obtained from the printer indicating a location at which printing was interrupted pursuant to the request for cancellation of printing;

wherein the prescribed print cancellation condition is whether a battery charge level of an internal battery has decreased to a preestablished prescribed value; and the print instruction means, in the event that the battery charge level of the internal battery recovers to the extent that the prescribed value is exceeded, causes the interrupted printing to resume based on the stored interruption location information.

However, in a similar field of endeavor Watanabe discloses a printing system. In addition, Watanabe discloses the host **(the camera)** comprising storage means for storing interruption location information obtained from the printer indicating a location at which printing was interrupted pursuant to the request for cancellation of printing **(described in paragraph 0109, “the printing is halted and interrupt information with which where the printing has been performed can be identified is stored in the EEPROM 504 of the camera”)**;

wherein the prescribed print cancellation condition is whether a battery charge level of an internal battery has decreased to a preestablished prescribed value **(described in**

paragraph 0109); and

the print instruction means, in the event that the battery charge level of the internal battery recovers to the extent that the prescribed value is exceeded, causes the interrupted printing to resume based on the stored interruption location information **(described in paragraph 0115-0116).**

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kumazawa in view of Yokoyama, and store interruption location information obtained from the printer indicating a location at which printing was interrupted pursuant to the request for cancellation of printing, and in the event that the battery charge level of the internal battery recovers to the extent that the prescribed value is exceeded, causes the interrupted printing to resume based on the stored interruption location information, as taught by Watanabe. The motivation for doing this is that when the power supply is resumed, the remaining printing can be performed, as disclosed by Watanabe **(paragraph 0115 – 0116).**

Regarding claim 12 (depends on claim 9), Kumazawa in view of Yokoyama fail to explicitly disclose the host apparatus wherein:

the prescribed print cancellation condition is whether a battery charge level of an internal battery has decreased to a preestablished prescribed value; and the print instruction means, in the event that the battery charge level of the internal battery recovers to the extent that the prescribed value is exceeded, obtains, from the

printer, interruption location information indicating a location at which printing was interrupted pursuant to the request for cancellation of printing, and causes the interrupted printing to resume based on this interruption location information.

However, in a similar field of endeavor Watanabe discloses a printing system. In addition, Watanabe discloses the host (the camera) comprising the prescribed print cancellation condition is whether a battery charge level of an internal battery has decreased to a preestablished prescribed value (**described in paragraph 0109**); and the print instruction means, in the event that the battery charge level of the internal battery recovers to the extent that the prescribed value is exceeded, obtains, from the printer, interruption location information indicating a location at which printing was interrupted pursuant to the request for cancellation of printing, and causes the interrupted printing to resume based on this interruption location information (**described in paragraph 0115-0116**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kumazawa in view of Yokoyama, and store interruption location information obtained from the printer indicating a location at which printing was interrupted pursuant to the request for cancellation of printing, and in the event that the battery charge level of the internal battery recovers to the extent that the prescribed value is exceeded, causes the interrupted printing to resume based on the stored interruption location information, as taught by Watanabe. The motivation for doing this is that when the power supply is

resumed, the remaining printing can be performed, as disclosed by Watanabe (paragraph 0115 – 0116).

Response to Arguments

6. Applicant's arguments filed May 10, 2010 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to QIAN YANG whose telephone number is (571)270-7239. The examiner can normally be reached on Monday-Friday 8:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on 5712727490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

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Customer Service Representative or access to the automated information system, call
800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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